



**King County**  
**Department of Permitting**  
**and Environmental Review**  
35030 SE Douglas St., Ste. 210  
Snoqualmie, WA 98065-9266  
**206-296-6600** TTY Relay: 711  
www.kingcounty.gov

May 7, 2014

William Nelson, Jr.  
16508 NE 79<sup>th</sup> Street  
Redmond, WA 98073

**RE:** Critical Areas Designation, CADS13-0003, Parcel No's. 0825069103, 9104, 9105, and the northern portion of 9102.

**Status:** Complete

Dear Mr. Nelson:

The above-referenced parcels were reviewed for the Critical Areas Designation. Review consisted of review of submitted information, existing background data and field visit. The parcels contain aquatic areas (streams), wetlands, a critical area recharge area (CARA), landslide hazard, steep-slopes, and seismic hazard area as discussed below.

Aquatic Areas (21A.24.355 to 21A.24.380)

The parcels contain aquatic areas (streams) as depicted on the site plan. The streams are Type F and N, with standard buffer widths of 165 feet for the F stream and 65 feet for the N stream. The buffers area measured from the ordinary high water mark (OHWM). Within a currently undeveloped buffer, no development of any kind is usually allowed, including clearing, grading, or any other alteration of the existing vegetation. Structures must honor an additional 15-foot building setback beyond the buffer.

Wetlands (21A.24.318)

There are wetlands located on and adjacent to the parcels as indicated on the site plans. The wetland was determined to be Category IV with 18 habitat points per Talasaea Consultants, Inc. The county concurs with this assessment. This category of wetland within the rural area shall have a 40-foot buffer of unaltered native vegetation as measure from the wetland edge. Within a currently undeveloped buffer, no development of any kind is usually allowed, including clearing, grading, or any other alteration of the existing vegetation. Structures must honor an additional 15-foot building setback beyond the buffer.

Critical Aquifer Recharge Area (21A.24.311 to 21A.24.316)

Your parcels are within a Category II Critical Aquifer Recharge Area (CARA). All three categories of CARA (I, II, and III) have development restrictions that affect industrial and commercial practices. However, only Category I and Category II CARAs have development restrictions that might affect residential development, and only for parcels less than one acre in size. Your parcels are not less than one acre in size, and so your planned residential development will not be affected by the presence of this critical area.

Landslide Hazard Area (21A.24.280)

Your property contains landslide hazard areas, some of which are associated with the steep slopes (described below) and some of which are not. Developments within landslide hazard areas are not allowed unless mitigation is included in the development proposal that eliminates or minimizes the hazard to permitted developments. This typically requires a geotechnical or geological assessment of the hazard, including a complete characterization of the landslide geometry and mechanism as well as recommendations for appropriate hazard mitigation. Mitigation may include changes to the development proposal (design changes or additional structures) or simply avoidance by positioning the development outside of the hazard zone. If the landslide is associated with a steep slope critical area, the steep slope regulations may also impact the development proposal.

Steep Slope Hazard Area (21A.24.310)

Your parcels contain steep slopes. Steep slopes are defined as those slopes that exceed forty percent inclination (about 21 degrees) and have a vertical elevation change of at least ten feet. The buffer required between the steep slope and any proposed development (which is to remain unaltered native vegetation), without providing a geotechnical study, is generally 50 feet. Structures must maintain an additional 15-foot building setback beyond the buffer. Where a geotechnical study confirms that the slope is stable and that development will not create a hazard, the buffer may be reduced.

In your case, a geotechnical report by Associated Earth Sciences Inc. dated April 5, 2012 was submitted with the application and reviewed by our staff. That report recommends a steep slope buffer reduction to 30 feet in the areas of four proposed building sites that will be created following some boundary line adjustments. The required additional 15-foot building setback will bring the total steep slope setback to 45 feet. We concur with the conclusions and recommendations presented in the Associated Earth Sciences report.

Seismic Hazard Area (21A.24.290)

The low-lying portions of your parcels are within a possible seismic hazard area. Seismic hazards, as defined here, include areas that host foundation soils that might liquefy during an earthquake, leading to loss of bearing capacity and settling or collapse of part of the structure. It is possible to build within a seismic hazard area, but only if mitigation is incorporated into the design of the

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structure (usually in the form of a special foundation) that eliminates or minimizes the impact of the hazard.

In order to determine the nature of the hazard, and hence the type of mitigation, we usually require an evaluation of the development site by a geological engineer or engineering geologist. The report should be a complete assessment of soil susceptibility to seismically induced liquefaction or other seismically induced settlement. Subsurface sampling is usually done, sometimes including deep borings, and if problematic soils are encountered, the engineer recommends appropriate changes to the building plans.

The presence of a seismic hazard area does NOT, however, affect the location of a septic system or water well. For this reason, we do not require a geological study until the building permit application review phase, although it is prudent to be aware of this issue prior to finalizing your building plans.

This completed Critical Areas Designation (CAD) letter and attached site plans are valid for 5 years from the date of the letter. Please submit this letter and site plan with your septic design to the Health Department.

Please note that the purpose of this review is to determine the location and classification of critical areas on your site and is not an approval of existing or proposed development. Additional reviews including drainage, clearing, shoreline, and fire flow could occur during the building permit process.

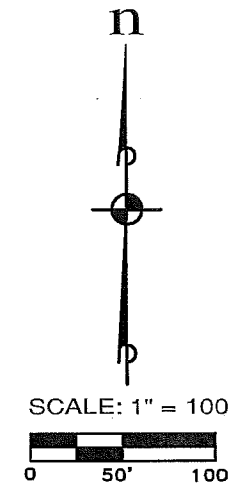
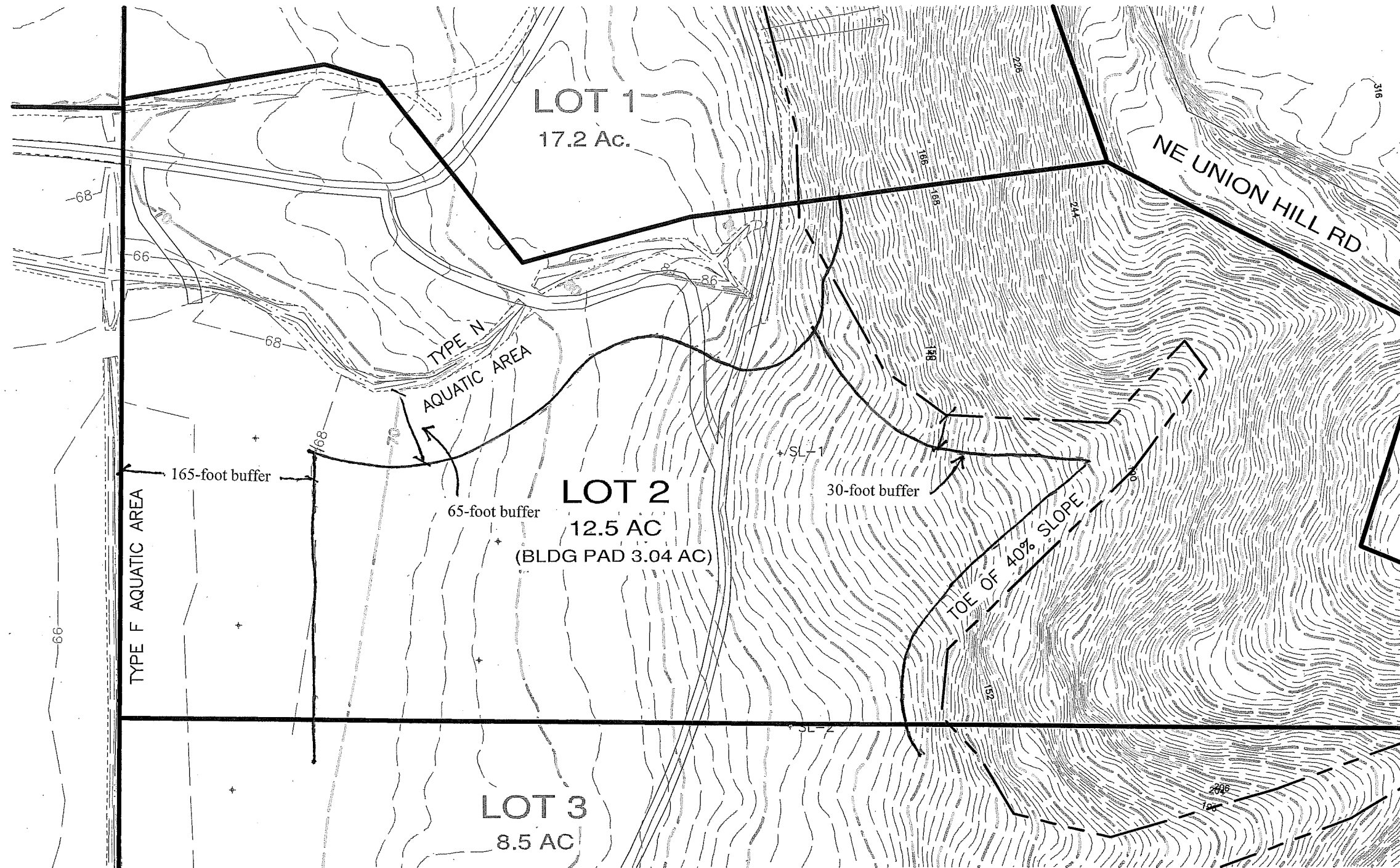
Sincerely,



Nick Gillen  
Critical Areas Section  
Land Use Services Division

Attachment: Site Plans

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Plotted: 5/9/2013 3:48 PM  
Plotted By: Jeff Hivva



## SITE DATA

COMP. PLAN DESIGNATION:	RURAL
ZONING:	RA-5, RA-5P
DRAINAGE BASIN:	EVANS CREEK
SEWER PROVIDER:	INDIVIDUAL SEPTIC SYSTEMS
WATER PROVIDER:	INDIVIDUAL WELLS
SCHOOL DISTRICT:	LAKE WA., SCHOOL DISTRICT (414)
FIRE DISTRICT:	KING COUNTY #34
TELEPHONE:	QWEST COMMUNICATIONS
POWER:	PUGET SOUND ENERGY
GAS:	PUGET SOUND ENERGY

## DEVELOPMENT STANDARDS (RA-5):

BASE DENSITY:	0.2 X DU/AC.
MIN. LOT AREA:	3.75 AC
MIN. LOT WIDTH:	135'
BUILDING SETBACKS:	
FRONT:	30'
INTERIOR:	10'
SIDE STREET:	10'
GARAGE:	20'
BASE BUILDING HEIGHT:	40'
MAX. IMPERVIOUS SURFACE:	20%

PARCEL NO.  
0825069103

## DISCLAIMER:

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THE ESTATE OF BARBARA J NELSON

GUNSHY MANOR

LOT 2 PARTIAL CRITICAL AREAS DESIGNATION

CONSULTING ENGINEERS LLC  
33400 8th Ave S, Suite 205  
Federal Way, WA 98003  
FEDERAL WAY (206) 839-6113  
EVERETT (425) 287-8800

www.esmcivil.com

ESM  
Civil Engineering  
Public Works  
Land Surveying  
Project Management  
Land Planning  
Landscape Architecture

JOB NO. 1359-0001-007  
DATE: 2013-05-09  
SHEET 1 OF 4  
DRAWN: ECL

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Plotted By: Jeff Hlava

## SITE DATA

COMP. PLAN DESIGNATION:	RURAL
ZONING:	RA-5, RA-5P
DRAINAGE BASIN:	EVANS CREEK
SEWER PROVIDER:	INDIVIDUAL SEPTIC SYSTEMS
WATER PROVIDER:	INDIVIDUAL WELLS
SCHOOL DISTRICT:	LAKE WA., SCHOOL DISTRICT (414)
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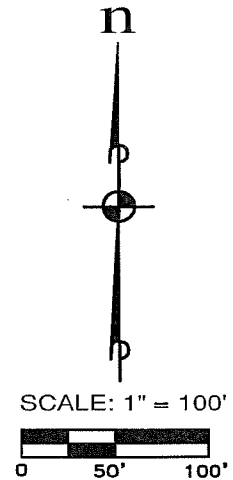
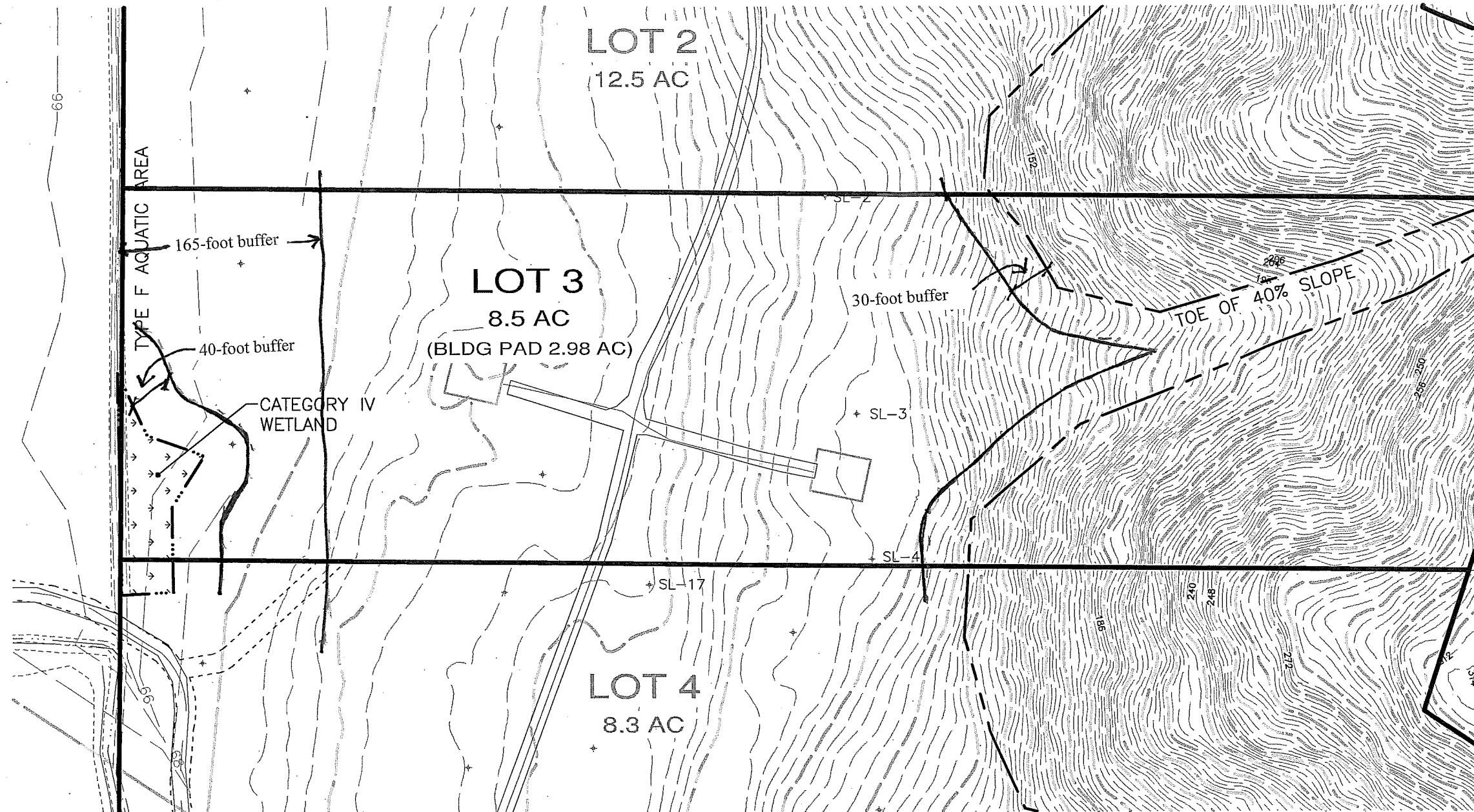
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BASE DENSITY:	0.2 X DU/AC.
MIN. LOT AREA	3.75 AC
MIN. LOT WIDTH:	135'
BUILDING SETBACKS:	
FRONT:	30'
INTERIOR:	10'
SIDE STREET:	10'
GARAGE:	20'
BASE BUILDING HEIGHT:	40'
MAX. IMPERVIOUS SURFACE:	20%

PARCEL NO.  
0825069104

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THE ESTATE OF BARBARA J NELSON

## GUNSHY MANOR LOT 3 PARTIAL CRITICAL AREAS DESIGNATION

**ESM** CONSULTING ENGINEERS, LLC  
33400 8th Ave S, Suite 205  
Federal Way, WA 98003  
www.esmcivil.com

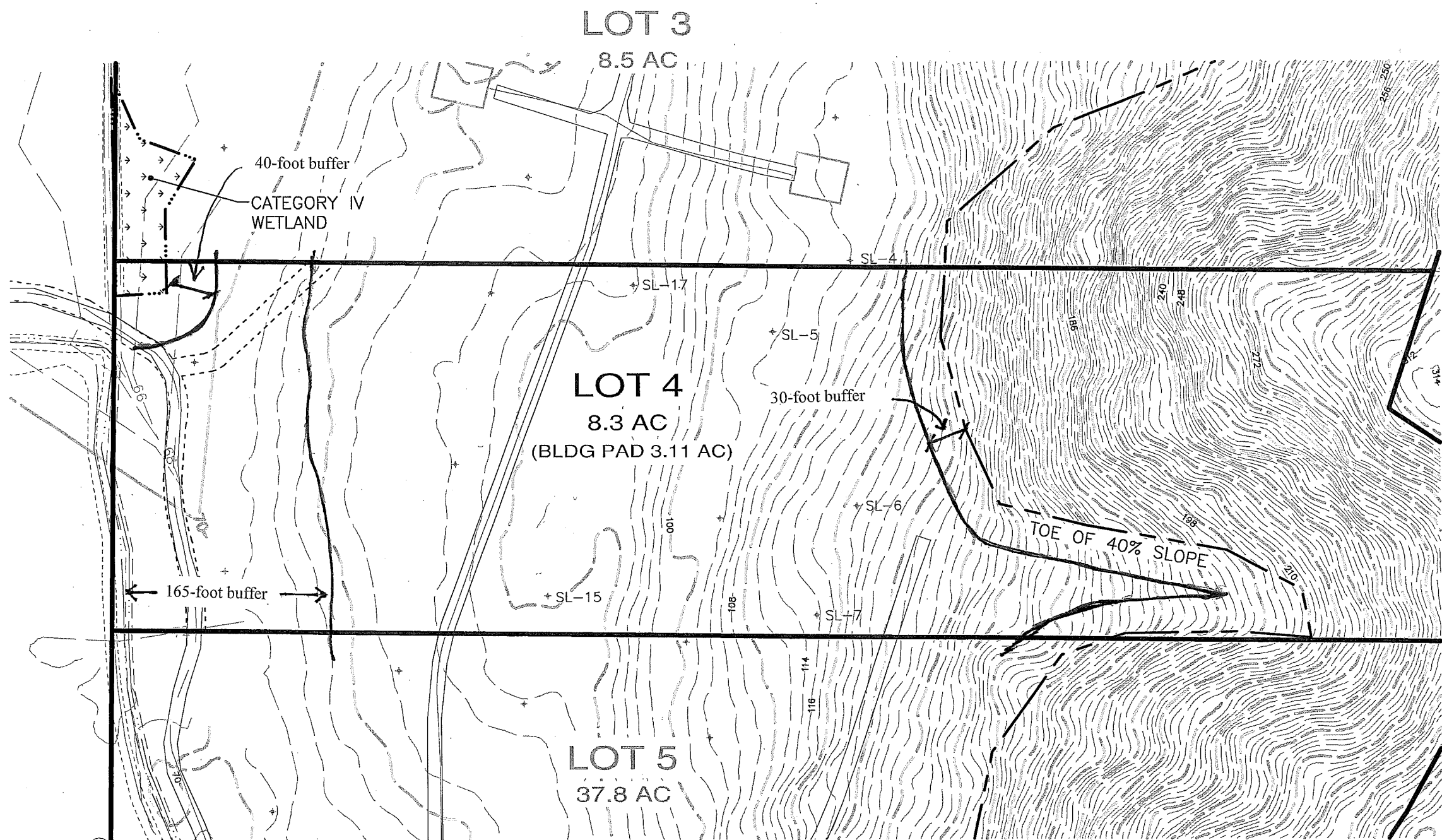
FEDERAL WAY EVERETT (253) 838-6113 (425) 237-8900

Civil Engineering	Land Surveying	Land Planning
Public Works	Project Management	Landscape Architecture
JOB NO. 1358-0001-007	DATE: 2013-05-09	SHEET 2 OF 4
DRAWN: EOL		

DRAWING: CAD-04



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## SITE DATA

COMP. PLAN DESIGNATION:	RURAL
ZONING:	RA-5, RA-5P
DRAINAGE BASIN:	EVANS CREEK
SEWER PROVIDER:	INDIVIDUAL SEPTIC SYSTEMS
WATER PROVIDER:	INDIVIDUAL WELLS
SCHOOL DISTRICT:	LAKE WA., SCHOOL DISTRICT (414)
FIRE DISTRICT:	KING COUNTY #34
TELEPHONE:	QWEST COMMUNICATIONS
POWER:	PUGET SOUND ENERGY
GAS:	PUGET SOUND ENERGY

## DEVELOPMENT STANDARDS (RA-5):

BASE DENSITY:	0.2 X DU/AC.
MIN. LOT AREA	3.75 AC
MIN. LOT WIDTH:	135'
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INTERIOR:	10'
SIDE STREET:	10'
GARAGE:	20'
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PARCEL NO.  
0825069105

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THE ESTATE OF BARBARA J NELSON

## GUNSHY MANOR

### LOT 4 PARTIAL CRITICAL AREAS DESIGNATION

**ESM** CONSULTING ENGINEERS LLC  
33400 8th Ave S, Suite 205  
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(252) 287-9900  
EVERETT

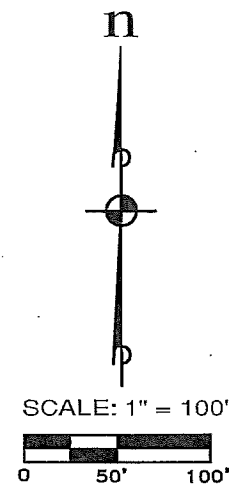
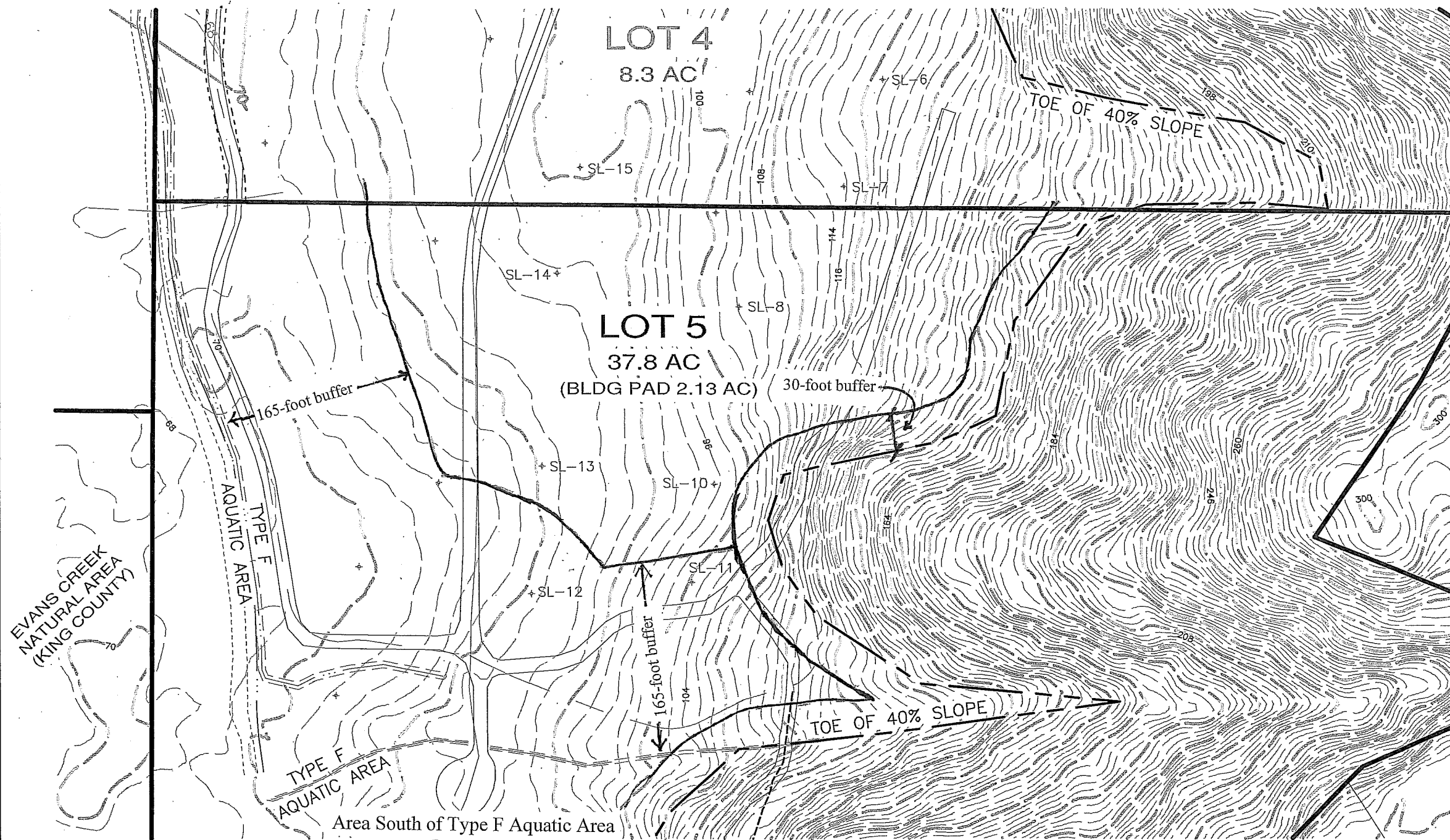
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Civil Engineering  
Public Works  
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Landscape Architecture

JOB NO. 1359-0001-007  
DATE: 2013-05-08  
SHEET 3 OF 4  
DRAWN: EFL

DRAWING: CAD-04

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Plotted: 5/9/2013 3:49 PM  
Plotted By: Jeff Hiva



## SITE DATA

COMP. PLAN DESIGNATION:  
ZONING:  
DRAINAGE BASIN:  
SEWER PROVIDER:  
WATER PROVIDER:  
SCHOOL DISTRICT:  
FIRE DISTRICT:  
TELEPHONE:  
POWER:  
GAS:

RURAL  
RA-5, RA-5P  
EVANS CREEK  
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KING COUNTY #34  
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## DEVELOPMENT STANDARDS (RA-5):

BASE DENSITY: 0.2 X DU/AC.  
MIN. LOT AREA: 3.75 AC  
MIN. LOT WIDTH: 135'  
BUILDING SETBACKS:  
FRONT: 30'  
INTERIOR: 10'  
SIDE STREET: 10'  
GARAGE: 20'  
BASE BUILDING HEIGHT: 40'  
MAX. IMPERVIOUS SURFACE: 20%

PARCEL NO.

0825069102

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THE ESTATE OF BARBARA J NELSON

GUNSHY MANOR

LOT 5 PARTIAL CRITICAL AREAS DESIGNATION

ESM CONSULTING ENGINEERS, LLC  
39400 8th Ave S, Suite 205  
Federal Way, WA 98003

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JOB NO. 1359-0001-007  
DATE: 2013-05-09  
SHEET 4 OF 4  
DRAWN: EHL